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ROBERT L. GALBREATH

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ORIGINAL FACSIMILE

(202) 296-6518

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March 10, 1997

**Via Hand Delivery**

William F. Caton, Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

RECEIVED

MAR 10 1997

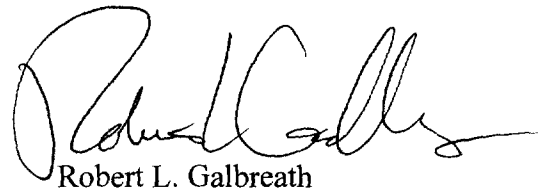
FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

**Re: Notice of Proposed Rule Making  
MM Docket No. 97-18  
RM-8943**

Dear Mr. Caton:

On behalf of GulfStar Communications New Mexico Licensee, Inc., there are submitted herewith an original plus four copies of Comments filed in response to the above-referenced Notice of Proposed Rule Making. Should there be any questions regarding the materials submitted herewith, please contact this firm.

Very truly yours,



Robert L. Galbreath

RLG:wp  
Attachments  
3676-033

No. of Copies rec'd  
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**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

**RECEIVED**

**MAR 10 1997**

**FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY**

In the Matter of	)	
	)	
Amendment of Section 73.202(b)	)	MM Docket No. 97-18
Table of Allotments	)	RM-8943
FM Broadcast Stations	)	
(Durango, Colorado)	)	

**COMMENTS OF  
GULFSTAR COMMUNICATIONS NEW MEXICO LICENSEE, INC.**

GulfStar Communications New Mexico Licensee, Inc. ("GulfStar"), by counsel and pursuant to Section 1.415 of the Commission's Rules, hereby submits its comments in response to the above-captioned Notice of Proposed Rule Making ("NPRM") to allot Channel 243A to Durango, Colorado. For the reasons discussed herein, GulfStar proposes as an alternative the allotment of Channel 287A to that community.

On February 28, 1997, GulfStar became the licensee of Station KDAG(FM), Farmington, New Mexico pursuant to the consummation of an assignment of the station license to GulfStar from J. Thomas Development of New Mexico, Inc.<sup>1/</sup> Station KDAG currently operates on Channel 245C1. In the NPRM, the Commission proposed site restrictions for the new Durango, Colorado allotment in order to avoid a short-spacing to the licensed facilities of Station KDAG.<sup>2/</sup>

Concurrently herewith, GulfStar is filing an application for upgrade of Station KDAG to full Class C status. A copy of that application is attached hereto as Exhibit 1. While the Commission's site restriction placed on the Durango allotment would protect the operation of

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<sup>1/</sup> See FCC File No. BALH-961212EC.

<sup>2/</sup> NPRM at Note 2.

Station KDAG as currently licensed, such restriction is insufficient to protect the upgrade of that facility proposed by GulfStar, thereby preventing KDAG from serving its maximum potential audience. Therefore, GulfStar offers a counterproposal to the allotment proposed in the NPRM. Instead of Channel 243A, GulfStar proposes that the Commission allot the alternative Channel 287A to Durango.

Attached hereto as Exhibit 2 is a Technical Exhibit prepared by GulfStar's engineers demonstrating that Channel 287A can be allocated to Durango, Colorado clear of all existing stations or pending applications with the exception of a construction permit for Station KRYD, Telluride, Colorado.<sup>3/</sup> The Technical Exhibit also demonstrates that suitable sites exist for the allotment of Channel 287A to Durango.

The public interest would be served by the adoption of GulfStar's alternative to the proposal set forth in the NPRM. The allotment of Channel 287A to Durango, Colorado would provide that community with a fourth FM service without restricting GulfStar's ability to operate Station KDAG at Farmington, New Mexico to its greatest possible power. GulfStar's proposal provides for the more efficient distribution of radio voices in northern New Mexico and southern Colorado.

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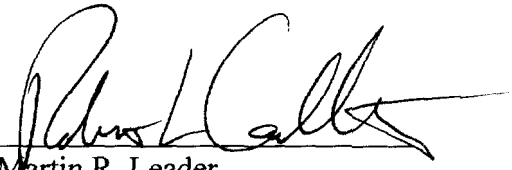
<sup>3/</sup> Station KRYD has a construction permit for Class C1 service. In order to avoid a short-space, the allotment of Channel 287A to Durango as proposed in Exhibit 2 would require a minor site restriction of 1.4 kilometers to the south. However, there is pending an application to downgrade Station KRYD from C1 to C3 (see FCC File No. BMP-961220IC). If granted, this downgrade would eliminate the need for such restriction.

**Conclusion**

Therefore, for the reasons set forth herein, GulfStar respectfully requests that the Commission reject the proposed allotment of Channel 243A to Durango, Colorado, and instead allot Channel 287A to that community.

Respectfully submitted,

**GULFSTAR COMMUNICATIONS  
NEW MEXICO LICENSEE, INC.**

By: 

Martin R. Leader  
Robert L. Galbreath  
C. Brooke Temple, III

Its Attorneys

Fisher Wayland Cooper Leader  
& Zaragoza L.L.P.  
2001 Pennsylvania Ave., N.W.  
Suite 400  
Washington, D.C. 20006  
(202) 659-3494

March 10, 1997

GulfStar Communications New Mexico Licensee, Inc.

**EXHIBIT 1**

FISHER WAYLAND COOPER LEADER & ZARAGOZA L.L.P.

2001 PENNSYLVANIA AVENUE, N.W.

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C. BROOKE TEMPLE III

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March 10, 1997

**Via Courier Delivery to Mellon Bank**

William F. Caton, Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

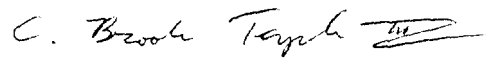
**Re:   Application for Major Modification  
      Station KDAG(FM), Farmington, New Mexico**

Dear Mr. Caton:

On behalf of GulfStar Communications New Mexico Licensee, Inc., there are submitted herewith an original plus two copies on FCC Form 301 of an application for major modification of Station KDAG(FM), Farmington, New Mexico, to upgrade the station facilities from Class C1 to Class C. Also submitted herewith is a check made payable to the Federal Communications Commission for the sum of Two Thousand Four Hundred Seventy Dollars (\$2,470.00) to cover the fee associated with this filing.

Should there be any questions regarding this matter, please contact the undersigned.

Very truly yours,



C. Brooke Temple III

Attachments  
3676-033

FOR  
FCC  
USE  
ONLY

## FCC 301

### APPLICATION FOR CONSTRUCTION PERMIT FOR COMMERCIAL BROADCAST STATION

FOR COMMISSION USE ONLY

FILE NO.

#### Section I - GENERAL INFORMATION

1. APPLICANT NAME (Last, First, Middle Initial)

GulfStar Communications New Mexico Licensee, Inc.

MAILING ADDRESS (Line 1) (Maximum 35 characters)

c/o Fisher Wayland:RLG

MAILING ADDRESS (Line 2) (Maximum 35 characters)

2001 Pennsylvania Avenue N.W., #400

CITY

Washington

STATE OR COUNTRY (if foreign address)

DC

ZIP CODE

20006

TELEPHONE NUMBER (include area code)

(202) 659-3494

CALL LETTERS

KDAG

OTHER FCC IDENTIFIER (IF APPLICABLE)

2. A. Is a fee submitted with this application?



Yes



No

B. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1113) and go to Question 3.



Governmental Entity



Noncommercial educational licensee



Other (Please explain):

C. If Yes, provide the following information:

Enter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in the "Mass Media Services Fee Filing Guide." Column (B) lists the Fee Multiple applicable for this application. Enter in Column (C) the result obtained from multiplying the value of the Fee Type Code in Column (A) by the number listed in Column (B).

(A)	(B)	(C)								
FEE TYPE CODE	FEE MULTIPLE (if required)	FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY							
(1) <table border="1"><tr><td>M</td><td>T</td><td>R</td></tr></table>	M	T	R	<table border="1"><tr><td></td><td></td><td></td><td>1</td></tr></table>				1	\$ 2,470.00	
M	T	R								
			1							

To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.

(A)	(B)	(C)									
			FOR FCC USE ONLY								
(2) <table border="1"><tr><td></td><td></td><td></td></tr></table>				<table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>					\$ <table border="1"><tr><td></td></tr></table>		

ADD ALL AMOUNTS SHOWN IN COLUMN C, LINES (1) THROUGH (2), AND ENTER THE TOTAL HERE. THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE.

TOTAL AMOUNT  
REMITTED WITH THIS  
APPLICATION

\$ 2,470.00

FOR FCC USE ONLY

**Section I - GENERAL INFORMATION (Page 2)**

3. This application is for: (check one box)

☐ AM

☒ FM

☐ TV

(b) Channel No. or Frequency

245

(b) Principal  
Community

City

Farmington

State

NM

(c) Check one of the following boxes:

☐ Application for NEW station

☒ MAJOR change in licensed facilities; call sign: \_\_\_\_\_ KMAG

☐ MINOR change in licensed facilities; call sign: \_\_\_\_\_

☐ MAJOR modification of construction permit; call sign: \_\_\_\_\_

File No. of construction permit; call sign: \_\_\_\_\_

☐ MINOR modification of construction permit; call sign: \_\_\_\_\_

File No. of construction permit; call sign: \_\_\_\_\_

☐ AMENDMENT to pending application: Application File Number: \_\_\_\_\_

NOTE: It is not necessary to use this form to amend a previously filed application. Should you do so, however, please submit only Section I and those other portions of the form that contain the amended information.

4. Is this application mutually exclusive with a renewal application?

☐ Yes ☒ No

If Yes, state:

Call letters

Community of License

City

State

**SECTION VI - EQUAL EMPLOYMENT OPPORTUNITY PROGRAM**

Does the applicant propose to employ five or more full-time employees?

☐ Yes ☐ No

If Yes, the applicant must include an EEO program called for in the separate Broadcast Equal Employment Opportunity Program Report (FCC Form 396-A).

**SECTION VII - CERTIFICATIONS**

1. Has or will the applicant comply with the public notice requirements of 47 C.F.R. Section 73.3580?

☒ Yes ☐ No

2. Has the applicant reasonable assurance, in good faith, that the site or structure proposed in Section V of this form, as the location of its transmitting antenna, will be available to the applicant for the applicant's intended purpose?

☒ Yes ☐ No

If No, attach as an Exhibit, a full explanation.

Exhibit No.

3. If reasonable assurance is not based on applicant's ownership of the proposed site or structure, applicant certifies that it has obtained such reasonable assurance by contacting the owner or person possessing control of the site or structure.

Name of person contacted: \_\_\_\_\_

Telephone No. (include area code): \_\_\_\_\_

Person contacted: (check one box below.

☐ Owner ☐ Owner's Agent ☐ Other (specify)

4. By checking Yes, the applicant certifies, that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862, or, in the case of a non-individual applicant (e.g., corporation, partnership or other unincorporated association), no party to the application is subject to a denial of federal benefits that includes FCC benefits pursuant to that section. For the definition of a "party" for these purposes, see 47 C.F.R. Section 1.2002(b).

☒ Yes ☐ No

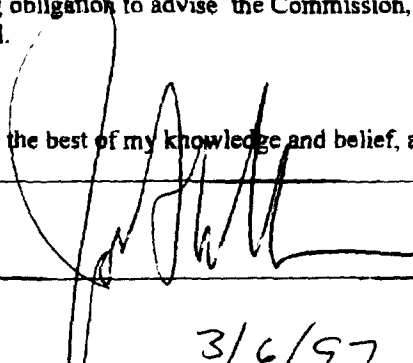
The APPLICANT hereby waives any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

The APPLICANT acknowledges that all the statements made in this application and attached Exhibits are considered material representations, and that all Exhibits are a material part hereof and incorporated herein.

The APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

In accordance with 47 C.F.R. Section. 1.65, the APPLICANT has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in information furnished.

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Name GulfStar Communications New Mexico Licensee, Inc.	Signature 
Title PRESIDENT/COO	
Typed or Printed Name of Person Signing John Cullen	Date 3/6/97

**WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).**

**SECTION V - B - FM BROADCAST ENGINEERING DATA**
**FOR COMMISSION USE ONLY**

File No. \_\_\_\_\_  
 SSB Referral Date \_\_\_\_\_  
 Referred By \_\_\_\_\_

Name of Applicant

**GULFSTAR COMMUNICATIONS NEW MEXICO LICENSEE, INC.**

Call Letters (if issued)

**KDAG**

Is this application being filed in response to a window?

☐ Yes ☒ No

If Yes, specify closing date:

---

Purpose of Application: (check appropriate boxes)

- |  |   |
|--|---|
| <input type="checkbox"/> Construct a new (main) facility                       | <input type="checkbox"/> Construct a new auxiliary facility                         |
| <input type="checkbox"/> Modify existing construction permit for main facility | <input type="checkbox"/> Modify existing construction permit for auxiliary facility |
| <input checked="" type="checkbox"/> Modify licensed main facility              | <input type="checkbox"/> Modify licensed auxiliary facility                         |

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

- |  |   |
|--|---|
| <input type="checkbox"/> Antenna supporting structure height             | <input type="checkbox"/> Effective Radiated Power       |
| <input checked="" type="checkbox"/> Antenna height above average terrain | <input type="checkbox"/> Frequency                      |
| <input checked="" type="checkbox"/> Antenna location                     | <input checked="" type="checkbox"/> Class               |
| <input type="checkbox"/> Main Studio location                            | <input checked="" type="checkbox"/> One-Step processing |
| <input type="checkbox"/> Directional Antenna                             | <input type="checkbox"/> Other(summarize)               |

File Number(s)

**BALH-961213 (KDAG)**
**1. Allocation:**

Channel No.	Principal community to be served:		
	County	City or Town	State
<b>245</b>	<b>SAN JUAN</b>	<b>FARMINGTON</b>	<b>NM</b>

Class (check only one box below)

- |                             |                             |                                       |
|-----------------------------|-----------------------------|---------------------------------------|
| <input type="checkbox"/> A  | <input type="checkbox"/> B1 | <input type="checkbox"/> B            |
| <input type="checkbox"/> C2 | <input type="checkbox"/> C1 | <input checked="" type="checkbox"/> C |

**2. Exact location of antenna.**

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark.

**KNICKERBOCKER PEAKS, SAN JUAN COUNTY, NEW MEXICO**

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude and East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed. (The Commission requires coordinates based on NAD 27.)

Latitude	<b>36°</b>	<b>48'</b>	<b>52"</b>	Longitude	<b>107°</b>	<b>53'</b>	<b>32"</b>
----------	------------	------------	------------	-----------	-------------	------------	------------

 3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? ☒ Yes ☐ No

**KTRA (FM) FARMINGTON, NM (LIC), NEW-FM CH. 275C, KIRKLAND, NM (APP)  
 AND TRANSLATOR APPLICATIONS (SEE TECH. NARRATIVE).**

If Yes, give call letter(s) or file number(s) or both.

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any.

**NO CHANGE IS PROPOSED**

Section V - B - FM BROADCAST ENGINEERING DATA (Page 2)

4. Does the application propose to correct previous site coordinates?  
If Yes, list old coordinates.

☐ Yes ☒ No

Latitude	0	'	"	Longitude	0	'	"
----------	---	---	---	-----------	---	---	---

5. Has the FAA been notified of the proposed construction?

☐ Yes ☒ No

If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available.

Exhibit No. ---
--------------------

Date \_\_\_\_\_ Office where filed EXISTING STRUCTURE

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

Landing Area	Distance (km)	Bearing (degrees True)
(a) <b>NONE WITHIN 8 KM.</b>	_____	_____
(b) _____	_____	_____

7. (a) Elevation (to the nearest meter)

(1) of site above mean sea level: 2067 meters

(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting if any): and 80 meters

(3) of the top of supporting structure above mean sea level [(a)(1) + (a)(2)]: 2147 meters

(b) Height of radiation center: (to the nearest meter) H = Horizontal; V = Vertical

(1) above ground: 69 meters (H)

69 meters (V)

(2) above mean sea level [(a)(1) + (b)(1)]; and 2135 meters (H)

**SEE EXHIBIT E-1 -DOES NOT  
ADD CORRECTLY DUE TO  
ROUNDING ERRORS**

2135 meters (V)

(3) above average terrain. 307 meters (H)

307 meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labeling all elevations required in Question 7 above, except item 7(b)(3). If mounted on an AM directional array element, specify heights and orientations of all array towers, as well as location of FM radiator.

Exhibit No. <b>E-1</b>
---------------------------

9. Effective Radiated Power:

(a) ERP in the horizontal plane 100 kw (H\*) 100 kw (V\*)

Is beam tilt proposed?

☐ Yes ☒ No

If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevation plot of radiated field.

Exhibit No. ---
--------------------

\*Polarization

--- kw (H\*) --- kw (V\*)

**Section V-B - FM BROADCAST ENGINEERING DATA (Page 3)**

10. Does this proposal modify a new unbuilt construction permit for an unbuilt, unlicensed facility?

☐ Yes ☒ No

If Yes, submit an Exhibit demonstrating compliance with 47 C.F.R. Section 73.3535 that includes a certification that construction will commence immediately upon grant of the construction permit application.

Exhibit No.  
---

11. Is a directional antenna proposed?

☐ Yes ☒ No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s), and tabulations of the relative field.

Exhibit No.  
---

12. Will the proposed facility satisfy the requirements of 47 C.F.R. Section 73.315(a) and (b)?

☒ Yes ☐ No

If No, attach as an Exhibit a request for waiver and justification therefor, including amounts and percentages of population and area that will not receive 3.16 mV/m service.

Exhibit No.  
---

13. Will the main studio be within the protected 3.16 mV/m field strength contour of this proposal?

☒ Yes ☐ No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125.

Exhibit No.  
---

14. Is this application being filed as a One-step proposal pursuant to the Report & Order in MM Docket 92-159, 8 FCC 2d 4735 (released July 13, 1995)?

☒ Yes ☐ No

If Yes, list the proposed allotment site coordinates to the nearest second below and attach an Exhibit demonstrating that the proposed allotment site is in compliance with the allotment standards. The Exhibit must contain: (1) an allotment site map that complies with the requirements of the April 5, 1985, Public Notice, Mimeo 3693, or a statement that the allotment site will be located on an existing tower; (2) a city coverage map, showing the allotment site is in compliance with 47 C.F.R. Section 73.315; (3) a showing demonstrating that the allotment site meets the minimum distance separation requirements of 47 C.F.R. Section 73.207; and (4) a statement that the proposed allotment site is suitable for tower construction.

Exhibit No.  
**E-2**

The coordinates for the proposed allotment site are:

Latitude	36 <sup>0</sup>	48'	52"	Longitude	107 <sup>0</sup>	53'	32"
----------	-----------------	-----	-----	-----------	------------------	-----	-----

15. (a) Does the proposed facility satisfy the requirements of 47 C.F.R. Section 73.207?

☒ Yes ☐ No

- (b) If the answer to (a) is No, does 47 C.F.R. Section 73.213 apply?

☐ Yes ☐ No

- (c) If the answer to (b) is Yes, attach as an Exhibit a justification, including a summary of previous waivers.

Exhibit No.  
---

- (d) If the answer to (a) is No and the answer to (b) is No, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose

Exhibit No.  
---

- (e) Is authorization pursuant to 47 C.F.R. Section 73.215 requested?

☐ Yes ☒ No

If the answer to (e) is Yes, attach as an Exhibit a complete engineering study demonstrating compliance with the minimum spacing requirements of 47 C.F.R. Section 73.215(e) and lack of prohibited overlap with the affected stations. The engineering study must include the following:

Exhibit No.  
---

**Section V - B - FM BROADCAST ENGINEERING DATA (Page 4)**

- (1) Protected and interfering contours, in all directions (360°), for the proposed operation.
- (2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as the transmitter location.
- (3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.
- (4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire Exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
- (5) The official title(s) of the map(s) used in the Exhibit(s).

16. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast (except citizens band and amateur) radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference?

☒ Yes ☐ No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. (See 47 C.F.R. Sections 73.315(b), 73.316(e) and 73.318.)

Exhibit No.  
**TECH.NAR**

17. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V (D). The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No.  
**E-3**

18. Attach as an Exhibit (name the source) a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.  
**E-4**

- (a) the proposed transmitter location, and the radials along which profile graphs have been prepared;
- (b) the 3.16 mV/m and 1 mV/m predicted contours; and
- (c) the legal boundaries of the principal community to be served.

19. Specify area in square kilometers (1 sq. mi. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 16,343.4 sq. km. Population 122,012

20. For an application involving an auxiliary facility only, attach as an Exhibit a map (Sectional Aeronautical Chart or equivalent) that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.  
**---**

- (a) the proposed auxiliary 1 mV/m contour; and
- (b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.

**Section V-B - FM BROADCAST ENGINEERING DATA (Page 5)**

21. Terrain and coverage data (to be calculated in accordance with 47 C.F.R. Section 73.313)

Source of terrain data: (check only one box below)

☐

Linearly interpolated 30-second database

☐

7.5 minute topographic map

(Source **N.G.D.C. 3-SEC TERRAIN DATABASE**)

☒

Linearly interpolated 3-second database

☐

Other (summarize) \_\_\_\_\_

Radial Bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances	
		To the 3.16 mV/m contour (kilometers)	To the 1 mV/m contour (kilometers)
<b>255 *</b>	<b>333.85</b>	<b>52.31</b>	<b>74.90</b>
0	<b>284.93</b>	<b>49.07</b>	<b>71.17</b>
45	<b>162.95</b>	<b>39.75</b>	<b>60.08</b>
90	<b>236.76</b>	<b>45.74</b>	<b>67.14</b>
135	<b>352.36</b>	<b>53.49</b>	<b>76.26</b>
180	<b>373.46</b>	<b>54.77</b>	<b>77.80</b>
225	<b>367.02</b>	<b>54.39</b>	<b>77.33</b>
270	<b>369.87</b>	<b>54.56</b>	<b>77.54</b>
315	<b>312.58</b>	<b>50.92</b>	<b>73.33</b>

\* Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of HAAT.

22. Environmental Statement. (See 47 C.F.R. Section 1.1301 et seq.)

Would a Commission grant of this application come within 47 C.F.R. Section 1.1307, such that it may have a significant environmental impact, including exposure of workers or the general public to levels of RF radiation exceeding identified health and safety guidelines issued by the American National Standards Institute?

☐

Yes

☒

No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by 47 C.F.R. Section 1.1311.

Exhibit No.

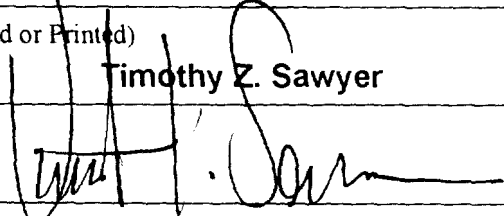
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If No, explain briefly why not.

**See Technical Narrative**

**CERTIFICATION**

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name (Typed or Printed)	Relationship to Applicant (e.g., Consulting Engineer)
<b>Timothy Z. Sawyer</b>	<b>Technical Consultant</b>
Signature	Address (include ZIP Code)
	<b>T.Z. Sawyer Technical Consultants 6204 Highland Drive, Chevy Chase, MD 20815</b>
Date	Telephone No. (include Area Code)
<b>March 6, 1997</b>	<b>(301) 913-9287</b>

**TECHNICAL EXHIBIT**  
**APPLICATION FOR**  
**FM CONSTRUCTION PERMIT**

**KDAG (FM)**

**GULFSTAR COMMUNICATIONS NEW MEXICO LICENSEE, INC.**  
**FARMINGTON, NEW MEXICO**

**CH 245C 100 KW 307 M HAAT**

**March 1997**

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FCC Form 301

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## **TECHNICAL EXHIBIT**

### **APPLICATION FOR FM CONSTRUCTION PERMIT**

#### **KDAG (FM)**

#### **GULFSTAR COMMUNICATIONS NEW MEXICO LICENSEE, INC. FARMINGTON, NEW MEXICO**

#### **CH 245C 100 KW 307 M HAAT**

#### **TECHNICAL NARRATIVE**

The technical exhibit, of which this narrative is part, was prepared on behalf of Gulfstar Communications New Mexico Licensee, Inc. in support of an application to modify the facilities of Station KDAG (FM), Farmington, New Mexico. KDAG operates on FM Channel 245C1 and seeks a one-step upgrade to full Class C operation. A new transmitter site is proposed which meets all appropriate FM channel spacing requirements, and complies with the "city of license" signal level requirements of the Commission's rules.

KDAG proposes operation on FM Channel 245C with an effective radiated power of 100 kilowatts and an antenna height above average terrain (HAAT) of 307 meters.

The proposal would not be subject to environmental processing in accordance with 47 C.F.R. §1.1306. This proposal does not involve a site location specified under 47 C.F.R. §1.1307 (a)(1)-(7), or involve high intensity lighting under 47 C.F.R. §1.1307(a)(8) or result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in 47 C.F.R. §1.1307(b). The Federal Aviation Administration has not been notified of this proposal. No change to the overall height of the existing antenna supporting structure is proposed.

This application conforms with all applicable rules and regulations of the Federal Communications Commission. General specifications for the proposed operation are included herein as Figure 1. Figure 2 contains an FM channel separation study, which shows that this proposal meets all required spacings in accordance with 47 C.F.R. § 73.207.

### **ANTENNA SUPPORTING STRUCTURE (EXHIBIT E-1)**

The proposed transmitting facility will consist of an 8-bay FM antenna side-mounted on a uniform cross-section steel tower. Exhibit E-1 contains a vertical sketch of the proposed antenna and supporting structure. The tower is currently in use by co-owned FM Station KTRA, Channel 271C, Farmington, New Mexico, and is the application site for a NEW (FM), Channel 275C, Kirtland, New Mexico and FM Translator Stations, NEW-T, Channel 291D, Cedar Hill, New Mexico and NEW-T, Channel 300D, Flora Vista, New Mexico.

### **ONE-STEP APPLICATION PROCESSING (EXHIBIT E-2)**

This application proposes a one-step upgrade in class of Station KDAG from 245C1 to 245C and meets all requirements for processing in accordance with the Commission's rules, the details of which are presented in Exhibit E-2.

### **TRANSMITTER SITE MAP (EXHIBIT E-3)**

The antenna location is uniquely described by the following geographic coordinates, which were verified on the "AZTEC, NM." U.S.G.S. 7 ½ minute quadrangle map:

36° 48' 52" North Latitude

107° 53' 32" West Longitude.

A large-scale topographic map upon which the transmitter location has been marked, is included herein as Exhibit E-3.

### **COVERAGE CONTOURS (EXHIBIT E-4)**

The predicted coverage contours were calculated in accordance with the provisions of 47 C.F.R. §73.313. In accordance with current FCC practice, no consideration was given to terrain roughness correction factors.

The average terrain elevations from 3 to 16 kilometers from the proposed site were obtained from the N.G.D.C. 3-second computer database. The standard eight radials evenly spaced at 45-degree intervals were used for determining the average terrain elevations and the distance to coverage contours. An additional radial at 255 degrees True was added to demonstrate compliance with the "city of license" coverage requirements.

The antenna radiation center heights above average terrain in the individual radial directions and the effective radiated power in the appropriate directions were used in conjunction with the F(50,50) curves of 47 C.F.R. §73.333 (Figure 1) to determine distances to the 70 dBu and 60 dBu contours. Exhibit E-4 is a map showing the predicted 60 dBu and 70 dBu coverage contours. As the map in Exhibit E-4 clearly shows, the 70 dBu (3.16 mV/m) contour from this proposal will encompass all of Farmington, New Mexico.

#### **POPULATION AND AREA**

The population to be served within the predicted 60 dBu contour was determined by a computer program that adds the population of census districts (at the block level) whose centroids lie within the contour. The 1990 U.S. Census data was employed. The area within the 60 dBu contour was calculated by a computer program using a root mean square algorithm. The predicted 60 dBu contour encompasses 16,343.4 square kilometers in which 122,012 persons reside.

#### **OTHER CONSIDERATIONS**

The "blanketing" contour of a 100-kilowatt FM station extends from the tower site a distance of 3.94 kilometers. The applicant recognizes its responsibility to remedy complaints of blanketing interference as required by 47 C.F.R. §73.318, and to protect existing facilities in accordance with applicable rules.

Figure 3 is a tabulation of "Other Stations" within 16 kilometers. No adverse impact (intermodulation or otherwise) on existing facilities or pending applications is anticipated. However, the applicant recognizes its responsibility to correct such matters if they occur as a result of its operation.

### **ENVIRONMENTAL CONSIDERATIONS**

The proposed facilities were evaluated in terms of potential radiofrequency radiation exposure at ground level in accordance with the revised OST/OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation." <sup>1</sup>

Power density contributions from the proposed operation were computed using the appropriate equations of the OST/OET bulletin. The horizontal and vertical polarized radiated maximum power is 100 kilowatts (200 kilowatts combined). Using a "worst-case" relative field pattern of 0.3 for all values 10 degrees and greater below the horizon from the antenna (see Exhibit E-5), the power density was computed at a level of 2 meters above ground to be 0.1357 mW/cm<sup>2</sup> or 13.57 % of the recommended limit of 1.0 mW/cm<sup>2</sup> for "controlled/occupational" exposure and 67.85 % of the recommended limit of 0.20 mW/cm<sup>2</sup> for "general public" exposure at the base of the supporting structure. Therefore, at ground level (and 2 meters above), at the base of the supporting structure, the potential for radiofrequency radiation exposure is well within the new (and old) FCC guidelines. However, as this is a proposed multiple use site, to be shared with co-owned FM Broadcast Station KTRA, Farmington, New Mexico, the contributions from Station KTRA must be considered in our calculations. KTRA employs an 8-bay antenna similar in design as that of the one proposed herein, and operates on 102.1 MHZ with an effective radiated power of 100 kilowatts,

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<sup>1</sup> ET Docket No. 93-62 as adopted on August 1, 1996 requires applicants to evaluate their facilities at two levels: the occupational exposure level and the general public exposure level. The new requirements were scheduled to take effect on January 1, 1997. However, the Commission has revised the effective date to September 1, 1997. As this proposal meets both the current and new exposure levels, the proposed facility was evaluated under the new guidelines.

employing circular polarization of its radiated signal. The center of radiation from the KTRA antenna is 62 meters above ground level. Using the same relative field value of 0.30 from the KTRA antenna, the computed power density at 2 meters above ground level is  $0.1670 \text{ mW/cm}^2$  or 16.70 % of the recommended limit. The mathematical combination for the two stations would be  $0.3027 \text{ mW/cm}^2$  or 30.27 % of the guideline for “controlled/occupational” exposure. Therefore, at ground level (and 2 meters above) at the base of the tower, the potential for radiofrequency radiation exposure will be well within the FCC guidelines for “controlled/occupational” exposure. No exposure in excess of the guidelines to workers is possible at ground level. The computed minimum distance from the antenna(s) is 24.5 meters, a location that occurs 37.5 meters above ground level.

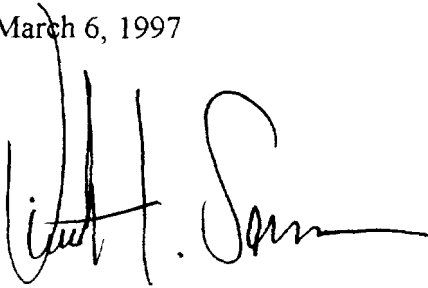
If work is to be conducted on the antenna, or supporting structure, the power to the antenna will be terminated or reduced to an acceptable level as required to meet the exposure guidelines. Access to the tower is restricted by appropriate anti-climbing devices and a restrictive fence. Warning signs will be installed at the base of the tower to inform workers that the power to the antenna(s) must be terminated before any required maintenance can be performed on the tower within the “controlled” maximum permissible exposure (M.P.E.) area. Suitable training and supervision will be provided to ensure that those with access to the tower follow the appropriate procedures. A written agreement will be reached with all parties with operations on the tower in which all parties agree to coordinate any repair work or installation of equipment on the tower with all other users to insure compliance with the Commission’s rules.

This is a closed communication site on a remote hill top, where the public would not normally have access. The computed power density at the base of the tower is  $0.3051 \text{ mW/cm}^2$  or 152.55 % of the recommended limit of  $0.20 \text{ mW/cm}^2$  for “general public” exposure. Warning signs will be placed at a distance of 45 meters (approximately 150 feet) from the base of the tower along all trails that lead to the tower site warning of the presence of radiofrequency energy above the maximum permissible level for the general public should they approach the tower site. The computed power

density level at a distance of 45 meters from the combined operations is  $0.1970 \text{ mW/cm}^2$ ; below the "general public" exposure level of  $0.20 \text{ mW/cm}^2$ . Therefore, the proposed operation is in compliance with the Commission's rules for exposure levels (M.P.E.) to workers and the general public.

Inquiries concerning the technical portion of this application should be directed to the office of the undersigned.

March 6, 1997

A handwritten signature in black ink, appearing to read 'Timothy Z. Sawyer', with a stylized, cursive script.

Timothy Z. Sawyer

***T.Z. Sawyer Technical Consultants***  
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Tel.: (301) 913-9287  
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**TECHNICAL EXHIBIT**

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**FARMINGTON, NEW MEXICO**

**CH 245C 100 KW 307 M HAAT**

**TECHNICAL SPECIFICATIONS**

Channel:	245C
Frequency:	96.9 MHZ
Site coordinates: (NAD27)	36° 48' 52" North Latitude 107° 53' 32" West Longitude
Site elevation above mean sea level:	2066.54 m
Average elevation above mean sea level of standard eight radials, 3-16 kilometers N.D.G.C. 30-Second Terrain Database:	1827.63 m
Overall height of existing antenna structure (with beacon)	
Above ground:	80.16 m
Above mean sea level:	2146.70 m
Height of FM antenna radiation center	
Above ground:	68.58 m
Above mean sea level:	2135.12 m
Above average terrain:	307.49 m (rounds to 307 m)

TECHNICAL SPECIFICATIONS  
KDAG (FM), FARMINGTON, NM

**FIGURE 1**  
SHEET 2 OF 2

Transmitter: FCC type accepted  
Maximum rated power output: 25.0 KW

Transmission line: \* Andrew HJ8-50B

Nominal diameter (over protective jacket): 76.6 mm ( $\approx$  3")  
Nominal inside transverse dimensions: 6.35 cm  
Dielectric: Air  
Rated power at frequency: 37.6 KW  
Length: 75 m  
Efficiency (0.339 dB loss): 92.5 %

Nondirectional FM Antenna: \* Shively Labs, Type 6810

Number of Bays: 8  
Input power rating: 40 KW  
Polarization: Circular  
Power gain:  
    Horizontal polarization: 4.46  
    Vertical polarization: 4.46

Proposed Operation

Transmitter power output: 24.25 KW  
Transmission line loss:  $\approx$  1.82 KW  
Antenna input power: 22.43 KW  
Effective radiated power:  
    Horizontal polarization: 100 KW  
    Vertical polarization: 100 KW

\*Or equivalent device

**FIGURE 2**

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**ALLOCATION STUDY**

**FM SEPARATION STUDY**

						FCC DB Date : 02/21/97			
Channel 245C ( 96.9 MHz)						Coordinates : 36-48-52 107-53-32			
Call Status	City State	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-Tru	Dist. (km)	Req. (km)	
-----									
<sup>1</sup>	Durango		243A		37-16-57	1.5	51.97	95	
PADD	CO	RM8943	96.5	.0	107-52-36		-43.03	SHORT	
Site Restriction 0.8km North									
<sup>2</sup>	KDAG	Farmington	245C1	100.	36-39-49	239.9	33.37	270	
LIC	NM	BLH820420AF	96.9	152.0	108-12-55		-236.63	SHORT	
KCCY	Pueblo		245C	72.	38-44-43	50.2	342.37	290	
LIC	CO	BLH940217KC	96.9	695.0	104-51-41		52.37	CLEAR	
KCYN	Moab		246C1	26.5	38-31-38	327.6	226.43	209	
CPM	UT	BMPH940623ID	97.1	489.0	109-17-12		17.43	CLEAR	
From Channel 244C3-One-Step Application									
KCYN	Moab		246C1	30.	38-31-37	327.3	227.33	209	
APP	UT	BMPH970129ID	97.1	394.0	109-18-21		18.33	CLEAR	
KKSS	Santa Fe		247C	100.	35-46-50	132.8	167.98	105	
LIC	NM	BLH850926KA	97.3	572.0	106-31-35		62.98	CLEAR	

\*\* End of separation study for channel 245C \*\*

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<sup>1</sup> An alternate channel has been determined for the proposed Channel 243A allotment at Durango, Colorado, and will be advanced during the comment period.

<sup>2</sup> Present operation of KDAG.